

**City of Falls Church Urban Forest Management Plan (UFMP) – Draft Outline 6/10/2020
8/20/20**

A. Executive Summary

1. List urban forestry values and the purpose of the UFMP
2. Trend(s) in Arborist budgets (also canopy cover % in years of new analysis)
3. Highlight goals achieved or modified this year; and any other significant items
4. Highlight any public involvement
5. Thank and ask for support

B. Introduction [change only the benefits calculations & costs/benefits]:

1. Urban forest is a valuable infrastructure (when available, insert the value of CFC trees' environmental benefits calculated using iTree) (and cost/benefit analysis[1]). [Consider generating this analysis less than once a year – once we've done it, we'll know how much work it is and whether we can make it easier next time])
2. Urban forestry supports other city goals, i.e. transportation, sustainability, low impact development, green infrastructure. Refer also to Comprehensive Plan elements that support/are supported by urban forestry.
3. The urban forest is a key element in CFC's image, sense of place and quality of life.
CFC's history as the first in Virginia to celebrate Arbor Day and to become Tree City USA are important to the city's identity.

C. Uses of the UFMP include describing the urban forestry program to stakeholders, ensuring resources are allocated in service of city goals, and an Annual reassessment allows adjustment of work plans and/or goals

1. Annual report card on status and progress toward goals (canopy assessed every 5 years) including:
 - a) Number trees planted and if the Annual planting goal has been met?
 - b) Percent of city trees assessed
 - c) Number of trees pruned/removed/treated and
 - d) Citizen engagement
2. Annual and/or 5-year work plan [intended to be a simple list of annual goals and budget. A 5-year plan might have to be more complex and less accurate].
3. Staff provides an annual status report to UFC, which includes canopy assessed every 5 years, recommends work plan changes. (For fiscal year use. Arborist provides status report for May UFC recommendations meeting, arborist finalizes/presents work plan in June for implementation July 1

D. Vision & Goals (from the Comprehensive Plan) The Comprehensive Plan lists this as both part of Vision, and as "overarching goal": protect and enhance the network of trees, green spaces and naturalized land on public and private property throughout the City, and the plants and wildlife it supports.

Specific Goals

1. Canopy Cover: Achieve a canopy cover minimum of 50%.
2. Mature Tree Preservation: The City places a priority on mature tree preservation in residential projects and tree preservation/planting requirements for mixed use and commercial projects. [I feel like we should formalize a program around this]
4. Tree Maintenance: Keep trees well-maintained to maximize environmental benefits and prevent property damage/personal injury; trees are a consistent component of stormwater management and environmental resilience plans in the City.
 - a. Ensure City UF program has adequate resources and staff qualifications/ongoing education.
 - b. Continually track city-owned trees' status and condition.
5. Branding: Includes maintain Tree City USA status, continue supporting annual Arbor Day celebration, beautify our tree-lined streets and City entrances
6. Community Values: City residents are supportive of the city's urban forest and its management.
 - a. City codes, procedures and policies support achievement of UF vision and goals
 - b. City staff and property owners understand their roles in maintaining the urban forest
(We have been talking about this goal for a long time; I think it should be sussed out a little and we should develop a strategy for public education/information outreach that UFC would manage with the advice of UF staff.)
 - c. Maintain active tree recognition programs

E. Current Year (Annual) status report, aligned with the UFC's established goals.

1. (Goal 1) Canopy cover, assessed every 5 years (2014 data, 2019 data, 2024 data...)
2. (Goal 1 & 3) Meet Annual planting goal met
 - a. Number of city trees planted (number removed here or in section 4, below). Number of street trees planted vs. removed may be a better option (Goals 1 & 3) - this includes both public and private trees, and is the most changeable. (Parks are pretty full, and missing trees are easily replaced unless the canopy closes around the planting spot.)[2]
 - b. Number of street tree planting spaces still available Number of available planting spaces will need a volunteer to confirm in the inventory.
 - c. Diversity (Goal 4): No species should be more than 5% of the total. Genus diversity would also be important. The measure would be listing the top 5 species/genera, with the percentage each make up of the total city-owned trees, or confine the data to street trees.
 - d. Were any landscape plantings at city entrances added or lost (Goal 3)? How many entrances still need to be landscaped? Who is responsible?
3. (Goal 4) City-owned trees are well maintained. Include an appendix with aggregate data, by species or neighborhood or land use? All of the data tree by tree would be too large to print

(10,000 records):

- a. (Goal 4b) Percentage of city trees evaluated within the last 5 years (min. 20%) **Report doable from Tree Inventory**
 - b. (Goal 4b) Percentage of street trees whose ownership is known (report annually until it reaches 100%) **Report doable from Tree Inventory**
 - c. Number of city trees pruned, removed, failed. **Quantities are in the tree inventory - cost data are harder to come by.**
 - d. Percentage of street and park trees in good condition/street trees in good condition. **(School trees are managed separately at this time) Condition should be an average of the health and structure ratings - tracked separately, and both are important to how long a tree is likely to be with us. Report doable from Tree Inventory, but not all trees are recently assessed. Also, unlikely to change significantly each year - 5-year report better.**
 - e. Track progress of, and city response to, particular pests/diseases (meaning how many trees are affected, and how many are being treated). **This is doable because the city responds to so few pest problems, but would be more a discussion than a "score".**
 - ?. Development/implementation of proactive pruning for ensuring strong branch structures in young trees, eventually list # trees served annually
4. (Goal 6) Public support/involvement status **(These are short descriptions, rather than "scores")**
- a. (Goal 5) Annual Arbor Day celebration and renewed Tree City USA status **Doable**
 - b. UF Commission has its full 5 active members? List projects and progress **Doable**
 - c. (List new, upgrades and ongoing) Stewardship or information programs active in the last year: tree labels, NTP, FCCPS outreach, public information dissemination (including effectiveness of city web pages). Interactions with other related groups like VPIS, ESC, CACT (transportation commission), regional Tree Stewards. Public interaction with the tree inventory database. **Doable**
 - d. (Goal 6c) Any nominations or other action on tree recognition programs?
 - e. (Goal 6a & 2) City codes, procedures and policies support achievement of UF vision and goals, and make city vs. property-owner responsibilities clear? (Assess current problems with codes and policies, list improvements made) **Doable, but only with minimal analysis**
5. (Goal 4a) Resources
- a. staff numbers, qualifications and training current year; involvement in regional and/or national urban forestry groups/programs? **Doable**
 - b. current year's budget **Doable**
 - c. current equipment/software **Doable**
 - d. Contracts (\$/tree work, \$/planting, \$/treating pests) **Doable**

e. volunteers

f. Grants, other resources

g. In-house tree work, # trees and costs - data difficult or impossible to get

h. Resources adequate to meet goals? - discuss in relation to work done/not done; compare to previous year(s). Takes time to assess and analyze. Percentage completed, of the work listed in the inventory as needed, could be a measure.

6. Miscellaneous achievements, if any: cooperation with another department or agency; lost or gained resources or volunteers; responded to natural disasters or new pest/disease problems.

7. (Goal 2) Number of trees removed, preserved and/or planted on commercial, mixed-use and City projects.

8. (Goal 2 and 6b) Number of annual tree code violations (enforcement will vary with staff availability); the # of violations should decline if our code updates and outreach are effective)

F. Work Plan for Upcoming Year

1. Tree planting

a. Prioritized areas if known (including city entrances) and number of trees budgeted

b. Tree selection (any changes in species/size/type/quality), and actions to reduce over planting of the most-common species

c. Expected volunteer involvement, and any support for planting on private properties

2. Tree Management

a. Preventive maintenance – will address which/how many trees this year?

b. Reactive maintenance (anticipated/budgeted quantity)

c. Pest/disease management

d. Inspections – preferably one quadrant of the city each year

3. Tree-related Codes and Policies/Plans

a. Any changes recommended by analysis of existing codes, policies, plans

4. Urban Forestry Commission

a. Projects: commercial-district green space, preserving mature trees during development

b. Development?: training opportunities, recruitment

5. Public Relations, Education, Volunteers – possible work plan items:

a. Arbor Day, Tree City USA, Tree of the Year, Specimen Trees program

b. Information and links on City web pages

- c. Neighborhood Tree Program: volunteer planting, providing private street trees
- d. Presentations to schools, other groups
- e. Make some city tree inventory data public; crowd-source some tree data?
- f. Review of, or nominations to, Specimen Trees? New recognition programs?
- g. Possible volunteer tasks: presentations, tree labeling, help with tree inventory, minor tree maintenance, citizen science projects

G. Appendices

1. Canopy cover map
2. Street tree cover map
3. Tree inventory data table (species, condition, structure, age, work needed, work done, #planted, #removed)
4. Current Specimen Trees list
5. City Arborist program budget comparisons of 3 fiscal years
6. Tree-related codes, plans, policies and procedures
 - a. Current city code sections that relate to trees
 - b. Relevant sections of Comp Plan, other plans, and Comp Plan sections (Comp Plan information on following page(s))
 - c. Streetscape Guidelines
 - d. Standard specifications for tree protection and planting on construction projects
 - e. Landscape conservation plan requirements/instructions for submitters
 - f. Possible plans, procedures or policies to add (they don't exist yet):
 - i. Pest/disease management policy
 - ii. Risk management policy
 - iii. Permits and code enforcement policy
 - iv. Policy on the use of un-refundable tree-related bonds
 - v. RPA planting/maintenance requirements for property owners
 - vi. Master tree planting plan: priority locations/species/schedule/budget
 - vii. Preventive maintenance plan/schedule/budget
 - viii. Storm response plan

NOTE: this plan includes annual data reporting, which could also be presented as a 'report card':

CFC produced a status report on its street trees (based on a sample only) in 2012, listing: [3]

- Number of street trees
- 5 most-abundant species [4]
- Water intercept and carbon sequestration \$ values
- Total and per-tree environmental benefits \$ values
- Replacement \$ value [5]

Casey Trees puts out an annual report card, giving itself a letter grade for each of the following:

- % change in canopy cover (annual grade, though assessed every 5 years or so)
- % of their trees found to be in good condition
- % of their planting goal met
- Protection – which Casey defines as the \$ amount collected in fines which was spent on planting

Falls Church has up to 10 urban forestry goals [6][7] we could report on annually, depending whether you lump some of them together (listed below). I am unsure how much work it will take to get environmental \$ values and cost/benefit comparisons, but in any case, I doubt they would change significantly on an annual basis. Maybe an ecosystem report-out every 5 years, to include the canopy re-assessments [8]?

Kate's new attempt:

5-year Ecosystem report:

1. canopy cover - overall, by land use, relation to goals
2. ecosystem benefits of existing trees (compare to benefits of 50% cover?)
3. percent city/street trees in good condition, and species diversity

1-year Annual report card:

- ~~1. Number trees planted. Annual planting goal met?~~
- ~~2. Percent of city trees proactively assessed in the last year.~~
 - ~~a. Number of trees pruned/removed/treated?~~
- ~~3. Support: Volunteer involvement. (clarity of responsibilities?) (stewardship info?)~~

Relevant Comprehensive Plan sections next page

Relevant text from the Nature and Environment Chapter of the Comprehensive Plan (2020): The City's 2040 Vision affirms that the City will strive to be a leader in environmental sustainability. **Vision Statement – Environmental Leadership**

Increase the resilience and environmental sustainability of the City by protecting, enhancing and expanding the City's natural resources; increasing the use of green infrastructure; reducing consumption and waste of both energy and materials; and using all possible means to achieve beneficial environmental impacts and enhance community quality of life.

The following **goals** are based on the vision statement above. These goals should be integrated across all City policies, programs and projects.

- **Climate, Air and Energy:** Enhance livability, sustainability and resilience. Protect the community from

air pollution and the effects of climate change, while reducing pollution and greenhouse gas emissions in the City.

- **Stormwater, Streams and Natural Springs:** Protect the water resources of the City and the Chesapeake Bay from the adverse effects of pollution and climate change, reduce flooding, and improve water quality.

- **Urban Forest and Biodiversity:** Protect and enhance the network of trees, green spaces and naturalized land on public and private property throughout the City, and the plants and wildlife it supports.

- **Consumption and Waste:** Avoid waste generation and reduce the harmful pollution and financial costs of waste management and disposal.

- **Community:** Inform, educate, and engage the community in environmental action. Maximize the City's capacity to address environmental issues through participation in regional, statewide, national, and international organizations. **Urban Forestry: Existing Policies, Programs and Projects**

Tree City USA: Falls Church was the first community in Virginia to celebrate Arbor Day and the first Tree City USA in the Commonwealth.

Specimen Trees Program: The City has about 50 Specimen Trees, which have special protection against damage or removal.

Urban Forestry Staff: The City has an Arborist and an Urban Forester, who are responsible for managing all City- owned trees and overseeing urban forest- related permits and enforcement. [This may need to be updated depending on the time it is released.](#)

Urban Forestry Commission: The City's five- member Urban Forestry Commission makes recommendations on relevant legislation, plans, policies, and programs. It also advises the City Arborist, City Council, and City Manager on tree- related matters.

Tree Inventory: The City has a complete inventory of City- owned or - regulated trees. The original dataset was generated in 2004, and the tree inventory has been updated on a continual basis since 2015.

Tree Ordinance: The City's tree ordinance regulates tree removal and tree contractors. Other City codes require single- family residential developments to preserve/replant trees to achieve 20 percent canopy coverage within 10 years.

Community Wildlife Habitat: The City has been designated a Community Wildlife Habitat by the National Wildlife Federation. This all- volunteer program tracks individual Certified Wildlife Habitats in the City and links residents with educational resources.

Neighborhood Tree Program: The City partners with the Village Preservation and Improvement Society on the Neighborhood Tree Program, to plant shade trees in street rights- of- way and on private property within 15 feet of public streets. **Evaluation of Needs**

The City needs to protect and expand tree canopy coverage to ensure environmental sustainability and resilience, city character, and adequate wildlife habitat. Although current coverage is high for an urban area, the pace of residential redevelopment is resulting in the replacement of mature trees with young ones, as mature trees often cannot be saved when building to lot limits. Commercial and mixed- use development projects are not replacing all removed trees. This can affect stormwater management and give rise to higher local temperatures where the shade and evaporative cooling effects of trees have been

lost. Removing trees also results in missed opportunities to create a unique sense of place in the City of Falls Church.

The city is experiencing a pace of development not seen in decades. The rapid rate of change in population, redevelopment and climate mean the city's development ordinances and regulations should be revisited and updated. Broader outreach is necessary to educate homebuyers and developers on the importance and benefits of the urban forest, and engage them in its support. Planning and zoning area development), need to be updated to better preserve and expand tree canopy.

Climate change not only increases the need for the benefits trees deliver, but may also affect the forest itself - for example, it may alter the selection of the best species for long term forest maintenance and tree succession planning. These issues can be addressed in an Urban Forest Management Plan. Such a plan would also improve program efficiency and accountability by defining responsibilities and prioritizing urban forestry resources and goals. **Strategies**

The following strategies will support the City's efforts to meet the goal for urban forest and biodiversity:

1. Optimize the use of the City's resources in achieving urban forestry goals.
2. Protect the City's tree canopy cover and increase overall tree coverage to 50 percent.
3. Preserve mature trees during residential redevelopment.
4. Implement green space requirements on all mixed use and commercial development projects, including projects to which "special exceptions" apply.
5. Continue to expand space for tree plantings and stormwater control in public areas, through increased street tree planting areas, greenways, park space, urban agriculture, publicly recognized historic landscapes and other green infrastructure.
6. Inform, educate, and engage the community in actions to support the urban forest and habitat, and increase City support for urban forestry volunteer programs.
7. Restore and protect the natural vegetation in stream corridors and other natural areas.
8. Encourage conservation landscaping, including native plantings, leaf- and lawn- mulching, and urban agriculture on public and private property.